## **Amendments to the Claims:**

Rewrite the claims as set forth below. This listing of claims replaces all prior versions and listings of claims in the application:

## **Listing of the Claims:**

1. (currently amended) A method for object based visibility culling comprising: receiving a plurality of draw packets;

comparing each of the plurality of draw packets to a bounding volume object, wherein the bounding volume object comprises—is a geometric representation of a specific object identified as geometry whose visibility status is desired;

for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier; and

rendering the one or more draw packets having the set visibility query identifier.

- 2. (currently amended) The method of claim 1 further comprising[[:]], prior to rendering the <u>one or more</u> draw <u>packets:packets</u>, providing the <u>plurality of</u> draw packets to a command processor such that the command processor checks for the set visibility query identifier.
- 3. (currently amended) The method of claim [[2]]1 wherein prior to rendering the one or more draw packetpackets the method further includes[[:]] fetching a plurality of indices for the one or more draw packetpackets.

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- 4. (currently amended) The method of claim [[2]]3 wherein when the visibility query identifier is not set, indicating that a particular the draw packet[[s]] as is not being visible, the command processor discards the draw packet prior to fetching a plurality of indices.
- 5. (currently amended) The method of claim 2 further comprising[[:]], prior to providing the <u>plurality of draw packets</u> to the command processor[[:]], stalling for a predetermined time interval to insure the setting of the visibility query identifier.
- 6. (previously presented) The method of claim 1 wherein comparing each of the plurality of draw packets to the bounding volume object includes at least one of the following: back-face culling, view frustrum comparison, user-clip plane discard, and hierarchical-z discard.
  - 7. (currently amended) A method for object based visibility culling comprising: receiving a plurality of draw packets;

comparing each of the plurality of draw packets to a bounding volume object, wherein the bounding volume object emprises is a geometric representation of a specific object identified as geometry whose visibility status is desired;

for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier;

providing the <u>plurality of draw packets</u> to a command processor such that the command processor checks for the set visibility query identifier; and

rendering the one or more draw packets having the set visibility query identifier, including fetching a plurality of indices for the one or more draw packets, wherein when the

visibility query identifier is not set, indicating the that a particular draw packet[[s]] as is not being visible, the command processor discards the draw packet.

## 8. (cancelled)

- 9. (currently amended) The method of claim 7 further comprising[[:]], prior to providing the <u>plurality of draw packets</u> to the command processor[[:]], stalling for a predetermined time interval to insure the setting of the visibility query identifier.
- 10. (previously presented) The method of claim 7 wherein comparing each of the plurality of draw packets to the bounding volume object includes at least one of the following: back-face culling, view frustrum comparison, user-clip plane discard, and hierarchical-z discard.
- 11. (currently amended) An apparatus for object based visibility culling, the apparatus comprising:
  - a general processing unit; and
- a memory device storing executable instructions such that the general processing unit, in response to the executable instructions:

receives a plurality of draw packets;

compares each of the plurality of draw packets to a bounding volume object, wherein the bounding volume object comprises is a geometric representation of a specific object identified as geometry whose visibility status is desired;

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for each of the plurality of draw packets, if the draw packet is deemed potentially visible, sets a visibility query identifier; and

renders the one or more draw packets having the set visibility query identifier.

- 12. (currently amended) The apparatus of claim 11 wherein the processor, in response to the executable instruction[[:]] and prior to rendering the draw packets, provides the <u>plurality</u> of draw packets to a command processor such that the command processor checks for the set visibility query identifier.
- 13. (currently amended) The apparatus of claim [[12]]11 wherein the processor, in response to the executable instructions[[:]], fetches a plurality of indices for the one or more draw packetpackets.
- 14. (currently amended) The apparatus of claim 12 wherein the processor, in response to the executable instructions[[:]] and when the visibility query identifier is not set, indicates the indicating that a particular draw packets packet as is not being visible, the command processor discards the draw packet.
- 15. (currently amended) The apparatus of claim 12 wherein the processor, in response to the executable instructions[[:]] and prior to providing the <u>plurality of draw packets</u> to the command processor, stalls for a predetermined time interval to insure the setting of the visibility query identifier.

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- 16. (previously presented) The apparatus of claim 11 wherein comparing each of the plurality of draw packets to the bounding volume object includes at least one of the following: back-face culling, view frustrum comparison, user-clip plane discard, and hierarchical-z discard.
  - 17. (currently amended) A method for object based visibility culling comprising: receiving a plurality of draw packets;

comparing each of the plurality of draw packets to a bounding volume object, wherein the bounding volume object emprises is a geometric representation of a specific object identified as geometry whose visibility is desired and wherein the geometric representation of the specific object is a low resolution model of the specific object that is rendered prior to a detailed model of the specific object;

for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier; and

rendering the one or more draw packets having the set visibility query identifier.

18. (currently amended) The method of claim 17 wherein:

prior to rendering the <u>one or more</u> draw packets, the method further includes providing the <u>plurality of</u> draw packets to a command processor such that the command processor checks for the set visibility query identifier, and

when the visibility query identifier is not set, indicating the that a particular draw packets packet as is not being visible, the command processor discards the draw packet prior to fetching a plurality of indices.

19. (currently amended) The method of claim [[17,]]18 wherein prior to providing the <u>plurality of draw packets</u> to the command processor, the method further includes stalling for a predetermined time interval to insure the setting of the visibility query identifier.